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MYCOLOGY.—*Some Discomycetes new to Alaska*. EDITH K. CASH, U. S. Bureau of Plant Industry, Soils, and Agricultural Engineering.

The extensive collections of fungi made in Alaska by Dr. Roderick Sprague during the summer of 1952 included a large number of Discomycetes which were referred to the writer for examination. Four collections were made of an apparently undescribed *Peziza*, which is therefore named here as new. Several species hitherto unreported from Alaska are proposed as new combina-

tions, and twenty additional species of Discomycetes are also briefly listed for which Dr. Sprague's collections constitute the first reports from Alaska.

1. *Peziza alaskana*, n. sp.

Apothecia dispersa, carnea, cupulata, margine leniter undulato, ex parte in terram arenosam sepulta, extus fusco-nigra, furfuracea, hymenio

glabro, purpureo-atro vel atro, 5–12 mm in diam., 3–8 mm alta; asci teretes, apice obtusi et leniter iodi ope azurescentes, gradatim basim versus attenuati, 275–300 × 15–18 μ ; ascosporae oblique uniseriatae, hyalinae, ellipsoideae, utrinque angustatae, subtiliter echinulatae, hyalinae vel pallide brunneolae; paraphyses numerosi, apicibus brunneis et usque 6–8 μ inflatis, in mazaedium brunneum agglutinati; textura excipularis hyphis pallide brunneis, laxae intertextis extus obscurioribus et furfuraceis composita.

Hab. ad terram arenosam, Alaska.

Apothecia scattered, fleshy, partially buried in sand, deep cup-shaped, margin slightly undulate, exterior fuscous-black,¹ furfuraceous, hymenium smooth, dull purplish black, 5–12 mm in diameter, 3–8 mm deep; asci terete, obtuse at the apex, faintly blue with iodine, gradually attenuated toward the base, 275–300 × 15–18 μ ; ascospores obliquely uniseriate, hyaline, ellipsoid, narrowed at the ends, minutely echinulate, hyaline to pale brownish, 22–24 × 9–10 μ ; paraphyses numerous, brown and swollen to 6–8 μ at the tips, becoming agglutinated into a dark brown mazaedium; exciple of pale brown, loosely interwoven, rather thin-walled hyphae, the outer layer darker and roughened by loose ends or clumps of hyphae.

ALASKA: Mendenhall area, July 9, 1952, R. Sprague 3²; Crocker Station no. 1, Mendenhall Glacier area, July 11, 1952, 20, type; Herbert Glacier area, July 19, 1952, 100; base of Red Mountain, Glacier Bay National Monument, August 12, 1952, 259, and Bear Track Cove, Glacier Bay National Monument, August 23, 1952, 469.

This small black *Peziza* resembles *Peziza brunneo-atra* Desm. in some respects, but the spores are narrower and more pointed and finely echinulate rather than verrucose. The apothecia in *P. alaskana* also remain deep cup-shaped, never becoming appanate as in *P. brunneo-atra*, and the hymenium is purplish-black, not tinged with green. The pale brown spores suggest *Aleurina* but they are even and finely echinulate, not reticulate.

¹ Color readings are from RIDGWAY, R., *Color standards and color nomenclature*. Washington, 1912.

² Collection numbers throughout are those of Roderick Sprague.

2. *Paxina arctica* (Nannf.), n. comb.

Helvella arctica Nannf. Svensk Bot. Tidskr. 31: 60, illus. 1937.

ALASKA: Glacier Bay National Monument: Anchorage Cove area, August 9, 1952, 232, and Forest Creek area, August 15, 1952, 276 and 282.

Helvella arctica was reported from arctic and subarctic regions of Sweden and Spitzbergen by Nannfeldt. The Alaskan collections agree with the original description and illustrations, and with type material issued in Lundell & Nannf. F. Exsicc. Suec. 369. The species may be readily recognized by the furfuraceous white margin surrounding the black hymenium. If *Paxina* is recognized as distinct from *Helvella*, the species would belong to the former genus.

3. *Helotium stipae* (Fckl.), n. comb.

Trichopeziza stipae Fckl. Symb. Myc. p. 297. 1869. *Helotium stigmaion* Rehm Hedw. 21: 99. 1882. *Helotium stigmaion* Rehm var. *minusculum* Rehm Ascom. no. 767. 1883; Hedw. 24: 13. 1885. *Phialea stipae* (Fckl.) Rehm Kryptogamenfl. Bd. 1, Abt. 3, p. 734. 1893.

ALASKA: on *Phleum alpinum*, base of Red Mountain, Glacier Bay National Monument, August 12, 1952, 613; *Poa alpina*, lake shore, Mendenhall Glacier area, July 9, 1953, 52; *Poa arctica*, Mount Gastineau, July 18, 1952, 264; *Poa compressa*, Glacier Bay National Monument, August 18, 1952, 743; *Poa trivialis*, Mendenhall Glacier area, July 10, 1952, 62.

This inconspicuous species, apparently confined to grasses, is reported by Rehm on *Stipa* and *Phleum*. The Alaskan specimens agree with Thuemen Mycotheca univ. no. 2020 on *Phleum pratense* and Krieger F. Saxon. 1835 on an undetermined grass. No record has been found of its occurrence in North America.

4. *Dasyscypha aspidii* (Lib.), n. comb.

Peziza aspidii Lib. Pl. Crypt. Ard. no. 226. 1832. *Trichopeziza aspidii* (Lib.) Fckl. Symb. Myc. p. 297. 1869. *Lachnum aspidii* (Lib.) Karst. Meddel. Soc. Faun. Fl. Fenn. 16: 27. 1888.

ALASKA: On *Dryopteris* sp., Sebree Island, Glacier Bay National Monument, August 19, 1952, 369.

As pointed out by Dennis, the use of the generic name *Lachnum* sensu Rehm for species of *Dasyscypha* with lanceolate paraphyses has no justification; the species is therefore referred to *Dasyscypha*.

In addition to the fungi listed above, Dr. Sprague's 1952 collections include the following Discomycetes not previously reported from Alaska: *Ascobolus glaber* Pers. ex Fr. on grizzly-bear dung, *Belonioscypha campanula* (Fr.) Rehm on *Hordeum*, *Dasyscypha calyculiformis* (Schum. ex Fr.) Sacc. on *Salix*, *D. leucophaea* (Pers. ex Weinm.) Mass. on *Lupinus nootkatensis*, *D. virginea* (Batsch ex Fr.) Fekl. on *Populus trichocarpa* and *Salix alaxensis*, *Helotium caudatum* (Karst.) Vel. on *Alnus*, *H. cyathoideum* (Bull. ex Fr.) Karst. on *Equisetum virgatum*, *Epilobium latifolium*, and *Bosnickia*, *H. leucellum* Karst. on *Alnus*, *H. scutula* (Pers. ex Fr.) Karst. on *Dryas*

drummondii and *Epilobium*, *H. virgultorum* (Vahl ex Fr.) Fr. on *Alnus* and *Sambucus*, *Humaria hemisphaerica* (Wigg. ex Fr.) Fekl., *H. umbrorum* (Fr.) Fekl., *Lamprospora amethystina* (Quél.) Seaver, *L. constellatio* (Berk. & Br.) Seaver, and *Mollisia uda* (Pers. ex Fr.) Gill. on *Alnus*, *Otidea auricula* (Cke.) Rehm, *Pyrenopeziza karstenii* Sacc. on *Agropyron trachycaulum* and *Poa*, *Rutstroemia nervisequia* (Schroet.) W. L. White on *Alnus*, *Stannaria persoonii* (Moug. ap. Pers. ex Fr.) Fekl. on *Equisetum*, and *Tapesia fusca* (Pers. ex Fr.) Fekl. on *Alnus*, *Salix*, and *Shepherdia*.

ZOOLOGY.—*Description of Eocycticus concavus* (Mackin) with a review of other North American species of the genus (Crustacea: Conchostraca). N. T. MATTOX, University of Southern California.¹ (Communicated by F. A. Chace, Jr.)

In a key to the phyllopods of Oklahoma and neighboring states, Mackin (1939) listed a previously undescribed species under the name *Estheria concava*. As a result of personal communications Dr. Mackin informed me that the original four specimens, on which the key characters were based, had been lost. However, another collection from the same locality contained eight specimens which Dr. Mackin kindly presented to me for study. Careful examination of these specimens resulted in the unquestionable decision that the species should be assigned to the genus *Eocycticus* Daday, 1915. I was then asked by Dr. Mackin to make a complete description of this unusual and interesting conchostracan.

Meanwhile there appeared in the key to the North American phyllopods by Pennak (1953) a listing of a species, presumably the species here under consideration, indicated as *Eocycticus concava* Mattox. The original designation by Mackin must be recognized even though it was based on the following incomplete diagnosis: "Rostrum shaped like a hatchet blade; with a row of large smooth spines along the mid-dorsal line, one spine for each trunk segment; hand of the male deeply incised at the base of the thumb; shell sway-backed." The diagnosis given by Pennak was: "Rostrum like hatchet blade;

with large, smooth spine on the middorsal line of most trunk segments; rare, poorly known; Okla." The specific name must be that of Mackin even though the generic designation is invalid. *Estheria* Ruppell 1837 as used for the Conchostraca is a homonym, as the name *Estheria* was first used for a genus of Diptera by Robineau-Desvoidy in 1830. The name *Estheria*, for conchostracans, is replaced by *Cyzicus* Audouin, *Eocycticus* Daday, *Caenestheria* Daday, *Caenestheriella* Daday, *Leptestheria* Sars, *Eoleptestheria* Daday, *Leptestheriella* Daday and *Cyclestheria* Sars. The original trivial name of the species under consideration, must be changed to agree with that of the genus, hence the name *Eocycticus concavus* (Mackin, 1939) is here given. Since the species has not previously been completely described a description is here presented and a neotype is designated. These animals were collected on August 12, 1928, in a temporary pool near Summerfield, Tex.

Eocycticus concavus (Mackin)

Description.—Male: The shell is elliptical with a straight dorsal hinge line extending two-thirds the shell length, and with a rounded ventral margin (Fig. 1, a). Posterior to the hinge the dorsal edge is straight extending ventrally at approximately a 20° angle. The anterior shell margin is rounded, extending ventrally very abruptly; the posterior portion is more attenuated. The greatest height of the shell is slightly

¹ Department of Zoology, Allan Hancock Foundation. Allan Hancock Foundation Contribution no. 124.